U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2008-004 EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER: COC72067

PROJECT NAME: Little Snake Clay Prospect

LEGAL DESCRIPTION: T9N R96W, section 10

APPLICANT: Moffat County Board of Commissioners, Moffat County

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

> Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.
>
> Remarks: The proposed Little Snake Clay Prospect would be located within Management Unit 16, L-1 (Little Snake Resource Management Plan). The objectives of Management Unit 16, L-1 are to protect and restore the riparian ecosystem (BLM, 1989).

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: To provide for the development of sand and gravel resources by Moffat County for county road maintenance.

PUBLIC SCOPING PROCESS: The project is listed on the NEPA log posted on the Little Snake Field Office web site.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: To randomly dig not more than 50 holes, of not more than 18-feet deep using a rubber tired backhoe. The backhoe footprint will be 3-feet wide by 15-feet long for a total major of the disturbance on the surface. A minor disturbance will affect the surface around each hole approximately 20-feet by 20-feet during the process of backfilling.

Surface Disturbance Estimates	Total ft.	Total Acres
Major surface disturbance for 50 holes	1,350 ft^2	0.03
Minor disturbance for 50 holes	20,000 ft^2	0.46
Total disturbance	21,350 ft^2	0.49

Approximately 2 cubic yards of topsoil material would be stripped and stored next to the trench, the overburden and gravel materials would be stored on the opposite side of the trench. Few (if any) samples would be taken from this pile with a shovel and a 5-gallon bucket. The purpose of the holes is to determine the depth to the bedrock material, and after these measurements are taken, the trench would be immediately backfilled, topsoiled, seeded and raked.

NO ACTION ALTERNATIVE: Implementation of the No Action Alternative would likely result in the continuation of current land uses and the maintenance of resource development trends on BLM-administered lands in the project area. Although selection of this alternative would preclude implementation of the proposed clay prospecting exploration project, this alternative would not preclude other mineral exploration or development on BLM-administered lands based on future analyses and approval of specific proposals.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action. Air quality within Moffat County is in compliance with federal and state ambient air quality standards. It is not anticipated that the proposed action will result in any change in air quality in Moffat County. As a consequence, impacts to air quality will not be discussed further in this document.

Environmental Consequences, Proposed Action: Vehicle traffic would loosen the soil surface in the short term and this could lead to more wind erosion and localized dust for short periods of time. However, these short-term dust storms will not present an environmental concern.

Environmental Consequences, No Action: Under the No Action Alternative, the Little Snake Clay Prospect Project would not be conducted and therefore air quality would not be affected.

Mitigative Measures: None

Name of specialist and date: Marilyn Wegweiser, 10/10/2007

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Rob Schmitzer, 10/15/07

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project(s), Cooper Road Re-route, has undergone a Class III cultural resource survey:

Darlington, David. 2007. Class III Cultural Resource Inventory Report for the Moffat County Road Department, Little Snake Clay Prospect, Moffat County, Colorado (BLM #12.5.08).

The survey identified one eligible to the National Register of Historic Places cultural resources (5MF6553). The proposed project may proceed as described in this EA with the following mitigative measures in place.

Mitigative Measures: 5MF6533 must be avoided by all construction and earth moving activities. A 400 x 400 ft buffer zone is to be placed around the site to protect the property from impacts resulting from extraction of the clay. The boundary of the buffer zone must be flagged and staked. That will be adequate to avoid unintentional trespass onto the site during the two – three day duration of the project. Once the project is completed the flagging must be removed.

The following standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or

archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Robyn Watkins Morris, 12/04/07

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Ranching, farming and oil and gas exploration/development are the primary economic activities.

Environmental Consequences, all alternatives: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None

Name of specialist and date: Mike Andrews, 10/10/07

FLOOD PLAINS

Affected Environment: The exploration operations will be conducted on an upland site and will not affect the floodplains of the Little Snake River.

Environmental Consequences, all alternatives: No Impacts

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 10/19/07

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Downy brome (cheatgrass), yellow alyssum, blue mustard and other annual weeds are common along roadsides and on other disturbed areas. Canada thistle and several species of biennial thistles are known to occur in this area. Halogeton, Russian knapweed and hoary cress (whitetop) are present in the vicinity of these projects. Other species of noxious weeds are not known to be a problem in this area, but they can always be introduced by vehicle traffic, livestock and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences, proposed action: The surface disturbing activities and associated traffic involved with excavating the test pits and disturbing the grounds adjacent to them would create a favorable environment for invasive species and noxious weeds to become established. Construction equipment and any other vehicles and equipment brought onto the site can introduce these weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (yellow alyssum, blue mustard and other annual weeds) occur on adjacent rangelands and would occupy the disturbed areas; the bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and can affect the establishment of seeded plant species. Halogeton is a noxious annual weed that would also occupy the disturbed areas, but these weed species would require intensive control with herbicides to prevent it from moving into adjacent rangelands. Establishment of adapted perennial grasses, other seeded plant materials and native colonizers is expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts have failed. Moffat County will be required to control any invasive and or noxious weeds that become established within the disturbed areas. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

The proposed seed mixture may not be adapted to these soil conditions and climate. However, the immediate backfilling of the test pits and the limited time that overburden and topsoil will be stockpiled adjacent to the pits may allow existing plants to resprout and root stock and seed within the topsoil to remain viable. The small disturbances may also be quickly colonized from native seed from adjacent undisturbed ground. In the event that the area is not selected for further development and the initial seeding or colonization of native

plants has not been successful after three growing seasons, the disturbed areas should be seeded again with adapted cool season grasses.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore invasive species would not be affected as a result of the project.

Mitigative Measures: In the event that the area is not selected for further development and the initial seeding or colonization of native plants has not been successful after three growing seasons, the disturbed areas will be seeded again with adapted cool season grasses.

Name of specialist and date: Ole Olsen, 10/19/07

MIGRATORY BIRDS

Affected Environment: The project area contains potential nesting and/or foraging habitat for the following USFWS 2002 Birds of Conservation Concern: Brewer's sparrow, burrowing owl, ferruginous hawk, golden eagle, prairie falcon, and loggerhead shrike. Although several of these species are known to nest in the area, GIS data for specific nest locations are currently unavailable. A survey for burrowing owls and ferruginous hawks was completed on May 19, 2008, no existing ferruginous hawks were located near the project area. The project area was surrounded by an active prairie dog town. While prairie dog colonies do provide nesting habitat for burrowing owls, there were no active nests located during this survey.

Environmental Consequences, proposed action: The proposed action would result in disturbance of 0.49 acres of saltbush fans and flats. Potential impacts for the above species include habitat degradation, fragmentation, and loss; individual displacement; and reduced fitness. Depending on timing of construction, unintentional destruction of nests and eggs and take of fledglings may occur. Given the scale of disturbance, the proposed action would be unlikely to have a measurable impact on migratory bird populations.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore migratory birds would not be affected as a result of the project.

Mitigative Measures: Timing restrictions for sage grouse and raptor species (see below) would also reduce impacts on migratory birds. **Based on a survey for both species completed on May 19, 2008, a one-time exception to the raptor nesting timing restriction can be granted. This is a one-time exception that is valid for the remainder of the 2008 nesting season only.**

Name of specialist and date: Charlie Sharp, 10/18/07

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Colorado Commission of Indian Affairs on January 21, 1999. The letter listed the projects that the BLM would notify them on and projects that would not require notification. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris, 12/04/07

PRIME & UNIQUE FARMLANDS

Affected Environment: There is no Prime and Unique Farmlands present in the vicinity of the Proposed Action.

Environmental Consequences, both alternatives: No Impact

Mitigative Measures: None

Name of specialist and date: Ole Olsen, 10/19/07

T&E AND SENSITIVE ANIMALS

Affected Environment: No threatened, endangered, or federal status species or habitat occurs in this area. Bald eagles roost during the winter along the Little Snake River, west of the project area. Three ferruginous hawk nests occur within 1 mile of the project area. One burrowing owl nest occurs within 0.25 mile of the project area. Each of these species likely forages in the project area. Two sage grouse leks occur within 2 miles and east of the project area. A survey for burrowing owls and ferruginous hawks was completed on May 19, 2008, no existing ferruginous hawks were located near the project area. The project area was surrounded by an active prairie dog town. While prairie dog colonies do provide nesting habitat for burrowing owls, there were no active nests located during this survey.

Environmental Consequences, proposed action: The proposed action would result in disturbance of 0.49 acres of primarily saltbush fans and flats. Potential impacts for the above sensitive species include short-term habitat degradation, fragmentation, and loss; individual displacement; and reduced fitness. Such impacts are more significant during critical seasons, such as winter or reproduction periods. Individuals using the area are likely to be temporarily displaced during project activities and may find the area temporarily unsuitable once the project is complete. Most individuals using the area would be capable of avoiding project activities and should not be directly harmed. Depending on project timing, nests, eggs, or fledglings may be crushed or killed. With the following mitigation, the proposed action “may affect, but not likely to result in a trend toward federal listing” for the bald eagle, ferruginous hawk, burrowing owl, and sage grouse.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore T&E and sensitive animals would not be affected as a result of the project.

Mitigative Measures: To protect the ferruginous hawk, no activities would occur between February 1 and August 15 within 1 mile of nests. To protect the burrowing owl, no activities would occur between February 1 and August 15 within ¼ mile of nests. Upon formal request, an exception to these timing restrictions may be granted by a BLM biologist if it is determined that the nest(s) is inactive or unoccupied on or after May 15. This restriction may also be suspended once if young have fledged and dispersed from the nest. To protect nesting sage grouse, no surface disturbing activities will occur between March 1 and June 30 within a 2 mile radius of active leks within suitable nesting habitat. No exceptions are identified for this stipulation. If the operator wishes to construct during this time period, a site evaluation will be conducted by a qualified biologist to determine presence/absence of nesting habitat. If surveys are conducted by a contractor, a formal report will be submitted to a BLM biologist for review. The timing restriction would not apply to those areas deemed unsuitable for sage grouse nesting. **Based on a survey for both species completed on May 19, 2008, a one-time exception to the raptor nesting timing restriction can be granted. This is a one-time exception that is valid for the remainder of the 2008 nesting season only.**

Name of specialist and date: Charlie Sharp 10/18/07

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the Proposed Action.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 10/17/07

WASTES, HAZARDOUS OR SOLID

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment.

Environmental Consequences, proposed action: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore there would be no chance of hazardous wastes being released as a result of the project.

Mitigative Measures: None

Name of specialist and date: Jeremy Casterson, 10/29/07

WATER QUALITY – GROUND

Affected Environment: The Oligocene Brown's Park Formation crops out at the surface at this location and is covered in places by Quaternary alluvium (0' – 1-meter in thickness).

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Marilyn D. Wegweiser, 10/09/2007

WATER QUALITY – SURFACE

Affected Environment: The Oligocene Brown's Park Formation crops out at the surface at this location and is covered in places by Quaternary alluvium (0' – 1-meter in thickness).

Environmental Consequences, proposed action: None anticipated. The proposed action could increase surface run-off being delivered to recovering riparian systems, should unprecedented heavy rains occur prior to reclamation of the area.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore there would be no impact to surface water quality as a result of the project.

Mitigative Measures: Operator committed measures should be adequate to protect surface waters.

Name of specialist and date: Marilyn D. Wegweiser, 10/07/2007

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian zones or wetlands occur in the project area.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Charlie Sharp 10/18/07

WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences, all alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Rob Schmitzer, 10/15/07

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present

Environmental Consequences, all alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: Rob Schmitzer, 10/15/07

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: The Oligocene Brown's Park Formation crops out at the surface at this location and is covered in places by Quaternary alluvium (0' – 1-meter in thickness).

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Marilyn D. Wegweiser, 10/09/2007

PALEONTOLOGY

Affected Environment: The Oligocene Brown's Park Formation crops out at the surface at this location and is covered in places by Quaternary alluvium (0' – 1-meter in thickness). The Brown's Park Formation has high potential for Oligocene mammal and vertebrate ichnofossils occurrences.

Environmental Consequences, all alternatives: None

Mitigative Measures: The operator is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the BLM as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage. These resources are afforded protection under **43 CFR 3802 and 3809**, and penalties possible for the collection of vertebrate fossils are under **43 CFR 8365.1-5.** Operator will report all occurrences of paleontological resources discovered to the appropriate surface management AO with the Little Snake Field Office of the BLM.

Unusual occurrences of plant and invertebrate fossils should be recorded, and representative examples may be collected by a BLM qualified & approved paleontologist, if appropriate. Concentrations of common plant or invertebrate fossils that may be suitable for public hobby collection areas should also be noted and reported to the Field Office paleontology program coordinator or paleontology program lead. Additional mitigation measures may be appropriate in some cases for these types of localities.

PYFC Classification: Class 4b – These are areas underlain by units with high potential but have lowered risks of human-caused adverse impacts and/or lowered risk of natural degradation due to tempering circumstances. The bedrock unit has high potential, but a protective layer of soil, thin alluvial material, or other conditions may lessen or prevent potential impacts to the bedrock resulting from the activity.

- Extensive soil or vegetative cover; bedrock exposures are limited or not expected to be impacted.
- Areas of exposed outcrop are smaller than two contiguous acres.
- Outcrops form cliffs of sufficient height and slope so that impacts are minimized by topographic effects.
- Other characteristics are present that lower the vulnerability of both known and unidentified fossil resources.

(1) Management concern for paleontological resources in Class 4 is moderate to high, depending on the proposed action.

(2) A field survey by a qualified paleontologist is often needed to assess local conditions.

(3) Management prescriptions for resource preservation and conservation through controlled access or special management designation should be considered.

Name of specialist and date: Marilyn D. Wegweiser, 10/09/2007

SOILS

Affected Environment: Exploration operations would occur mostly on soils mapped as the Ruedloff sandy loam, 1 to 8 percent slopes although a small area in the northwest portion of

the affected area is mapped as Ryark-Maybell complex, 1 to 12 percent slopes. Ryark soils have a loamy sand surface layer and sandy loam-loamy sand subsoils. Maybell soils are primarily sands. All of the soil types that are mapped have deep soil profiles which exceed 60-inches, but the sandy nature of the profile can only provide a water holding capacity that is considered low (4.2 inches). All of the soils have a moderately rapid to rapid permeability rates and low to very low runoff rates. The parent materials for these soils are typically eolian deposits and alluvium derived from sandstone and the annual precipitation that is typically received for the development of these soil types is 9 to 11 inches.

Environmental Consequences, proposed action: Salvage of topsoil would help to retain the soil properties of the surface layer which has good infiltration. Excavation and mixing the remainder of the soil profile with mixed alluvium deposits and possibly bedrock deposits from the Browns Park Formation would provide for uncertain subsoils and associated properties. The small surface disturbances that are involved with the excavated portion would result in a total of 1,350 square feet or 0.03 acres of modified soil profile. Some compaction of the surface layer along travel routes and in the working area around each of the excavations would also occur, but could be minimized under dry soil conditions and fair weather operations. The disturbed areas would be vulnerable to wind erosion until physical crusts, biological crusts or annual invasive weeds can initially stabilize the soils after exploration activities are completed. The proposed seed mixture may not be adapted to these soil conditions and climate.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore soils would not be affected as a result of the project.

Mitigative Measures: Do not commence operations if soils are wet or are threatened to become wet by inclement weather and suspend operations if sustained inclement weather occurs.

Name of specialist and date: Ole Olsen, 10/19/07

UPLAND VEGETATION

Affected Environment: Dominant plants present include Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), green rabbitbrush (*Chrysothamnus viscidflorus*), prickly pear (*Opuntia* spp.), needle-and-thread (*Stipa comata*), and Sandberg bluegrass (*Poa sandbergii*).

Environmental Consequences, proposed action: The proposed action would result in complete removal or crushing of approximately one-half acre of native vegetation in small, random spots throughout the approximately 50 acre project area. Additional vegetation disturbance would occur as the equipment moves cross-country from site to site, which would result in some sagebrush mortality. These disturbances would be relatively minor within the larger plant community, but the sandy texture of the soil would make areas of direct disturbance susceptible to cheatgrass and prickly pear invasion. Both species are

already present in the community, but further disturbance could exacerbate the presence of both of these plants. Reseeding with desirable species adapted to sandy soils would provide resistance to the tendency of these two species to increase in abundance following disturbances related to the proposed action.

Environmental Consequences, no action: The No Action Alternative would not result in any disturbance to existing vegetation and would not increase abundance of undesirable species.

Mitigative Measures: Seeded species should be those that are adapted to well drained, sandy soils. Recommended seed mix is:

Needle-and-thread	5 lb. PLS/acre
Indian ricegrass	5 lb. PLS/acre
Scarlet globemallow	1 lb. PLS/acre
Blue flax	1 lb. PLS/acre

Name of specialist and date: Hunter Seim, 10/22/07

WILDLIFE, TERRESTRIAL

Affected Environment: This region provides habitat for a variety of species including deer, elk, pronghorn, small mammals, and birds. Approximately 90% of the project area is classified as pronghorn severe winter range, and 10% as elk severe winter range.

Environmental Consequences: Pronghorn and elk winter range would be temporarily degraded as a result of this action. General impacts for wildlife include habitat degradation, fragmentation, and loss; individual displacement; and reduced fitness. Such impacts are more significant during critical seasons, such as winter or reproduction. Wildlife using the area are likely to be temporarily displaced during construction and may find the area unsuitable once construction is complete. Most small mammals and birds using the project area would be capable of avoiding construction activities and should not be directly harmed by these activities, although some burrowing animals may be killed by digging activities. Given the scale of disturbance, the proposed action would be unlikely to have measurable impacts on wildlife populations.

Environmental Consequences, no action: Under the no action alternative, the Little Snake Clay Prospect Project would not be conducted and therefore terrestrial wildlife would not be affected as a result of the project.

Mitigative Measures: To protect wintering elk and pronghorn, no surface disturbing activities would occur between December 1 and April 30 within severe winter range. Under certain conditions, the last 60 days of this timing period may be suspended at the discretion of a BLM biologist. A formal request must be submitted to the BLM if an exception to this timing restriction is desired.

Name of specialist and date: Charlie Sharp, 10/18/07

OTHER NON-CRITICAL ELEMENTS:

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Forest Management	JQC, 10/29/07		
Hydrology/Ground		MDW; 10/09/07	
Hydrology/Surface		MDW; 10/09/07	
Paleontology		MDW; 10/09/07	
Range Management		JHS 10/17/07	
Realty Authorizations	MAA, 10/10/07		
Recreation/Transportation		RS 10/15/07	
Socio-Economics		MAA, 10/10/07	
Solid Minerals		MDW; 10/09/07	
Visual Resources		RS 10/15/07	
Wild Horse & Burro Mgmt	JQC, 10/29/07		
Wildlife, Aquatic	CMS, 10/18/07		

CUMULATIVE IMPACTS SUMMARY:

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: Wildlife may be temporarily displaced during project activities and may, in the short-term, find the area unsuitable once construction is complete. The Little Snake Gulch Landscape was meeting this standard when assessed in 1998. The proposed action would not result in diminished animal production, diversity, or resilience. With application of timing restrictions, the proposed action would not preclude the landscape from meeting this standard. The No Action Alternative would meet this standard as no new disturbance would occur in the animal community.

Name of specialist and date: Charlie Sharp, 10/18/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The proposed action may result in a short-term loss of habitat or displacement of individuals but would not appreciably impact the stability or growth of special status species' populations. When assessed in 1998, the Little Snake Gulch Landscape was meeting the standard for healthy, stable, and increasing populations of sensitive and protected species. With application of timing stipulations, the proposed action would not preclude the landscape from

meeting this standard. The No Action Alternative would meet this standard as T&E animals would not be affected as a result of this project.

Name of specialist and date: Charlie Sharp, 10/18/07

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would result in small, localized disturbances to the plant community throughout the 50 acre project area. Some of these disturbances would involve crushing of vegetation through equipment movement and associated activity and others would involve complete removal of vegetation such as by digging. Overall, the small and dispersed nature of these disturbances would not, in themselves, preclude the area from meeting this standard, however, without appropriate reclamation using site-adapted species, there is a high potential for the Proposed Action to increase the abundance of two undesirable species that are well adapted to sandy soils—cheatgrass and prickly pear. As long as appropriate weed control and reseeding measures are taken, increases in these two species would be minimized and the Proposed Action would meet this standard. The No Action Alternative would meet this standard as no new disturbance would occur in the plant community.

Name of specialist and date: Hunter Seim, 10/17/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the Proposed Action. This standard does not apply.

Name of specialist and date: Hunter Seim, 10/17/07

RIPARIAN SYSTEMS STANDARD: No riparian or wetland systems occur in the project area or vicinity. This standard does not apply.

Name of specialist and date: Charlie Sharp, 10/18/07

WATER QUALITY STANDARD: The water quality standard for healthy public lands will be met with implementation of the Proposed Action. Mitigation is proposed to avoid direct excavations within surface drainages. This would alleviate a potential environmental consequence that could destabilize ephemeral tributaries of the Little Snake River. Runoff from snowmelt and summer storms will drain from the exploration area into the Little Snake River which is presently supporting classified uses. The Little Snake River is not listed as impaired stream segment, but it is still on the recent Monitoring and Evaluation Lists to determine if use impairments exist. The No Action Alternative would meet this standard as no new disturbance would occur in the watershed as a result of this project.

Name of specialist and date: Ole Olsen, 10/19/07

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, but it is not expected to while the surface remains disturbed with limited or no perennial plant cover and stabilization. The areas disturbed to excavate test pits would not

exhibit the characteristics of a healthy soil. Invasive annual plants or soil crusts will help to stabilize the soils and minimize wind and water erosion in the short term. Mitigating measures are recommended that would reduce impacts initially to upland soils and conserve soil materials in the long term. Upland soil health would return to the areas disturbed after reclamation practices have been successfully achieved. The No Action Alternative would meet this standard as no new disturbance would occur in the watershed as a result of this project.

Name of specialist and date: Ole Olsen, 10/19/07

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2008-004

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

DECISION AND RATIONALE:

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action with the mitigation measures described below will not have any significant impacts on the human environment. I have determined that the proposed project is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures identified below.

MITIGATION MEASURES:

1. In the event that the area is not selected for further development and the initial seeding or colonization of native plants has not been successful after three growing seasons, the disturbed areas will be seeded again with adapted cool season grasses.

2. To protect the ferruginous hawk, no activities would occur between February 1 and August 15 within 1 mile of nests. To protect the burrowing owl, no activities would occur between February 1 and August 15 within ¼ mile of nests. Upon formal request, an exception to these timing restrictions may be granted by a BLM biologist if it is determined that the nest(s) is inactive or unoccupied on or after May 15. This restriction may also be suspended once if young have fledged and dispersed from the nest. To protect nesting sage grouse, no surface disturbing activities will occur between March 1 and June 30 within a 2 mile radius of active leks within suitable nesting habitat. No exceptions are granted for this stipulation. If the operator wishes to construct during this time period, a site evaluation will be conducted by a qualified biologist to determine presence/absence of nesting habitat. If surveys are conducted by a contractor, a formal report will be submitted to a BLM biologist for review. The timing restriction would not apply to those areas deemed unsuitable for sage grouse nesting. **Based on a survey for both species completed on May 19, 2008, a one-time exception to the raptor nesting timing restriction can be granted. This is a one-time exception that is valid for the remainder of the 2008 nesting season only.**

3. Cultural resource 5MF6533 must be avoided by all construction and earth moving activities. A 400 x 400 ft buffer zone is to be placed around the site to protect the property from impacts resulting from extraction of the clay. The boundary of the buffer zone must be flagged and staked. That will be adequate to avoid unintentional trespass onto the site during the two –three day duration of the project. Once the project is completed the flagging must be removed.

4. Do not commence operations if soils are wet or are threatened to become wet by inclement weather and suspend operations if sustained inclement weather occurs.

5. To protect wintering elk and pronghorn, no surface disturbing activities would occur between December 1 and April 30 within severe winter range. Under certain conditions, the last 60 days of this timing period may be suspended at the discretion of a BLM biologist. A formal request must be submitted to the BLM if an exception to this timing restriction is desired.

6. Seeded species should be those that are adapted to well drained, sandy soils. The recommended seed mix is:

Needle-and-thread	5 lb. PLS/acre
Indian ricegrass	5 lb. PLS/acre
Scarlet globemallow	1 lb. PLS/acre
Blue flax	1 lb. PLS/acre

7. The following standard cultural stipulations apply for this project:

   The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

   - Whether the materials appear eligible for the National Register of Historic Places;
   - The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
   - Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony.
   - Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

8. If cultural or paleontological resources are discovered during exploration operations under this license, the licensee shall immediately notify the Field Office Manager and shall not disturb such discovered resources until the Field Office Manager issues specific instructions.

a. Within 5 working days after notification, the Field Office Manager shall evaluate any cultural resources discovered and shall determine whether any action may be required to protect or to preserve such discoveries.

b. The cost of data recovery for cultural resources discovered during exploration operations shall be borne by the licensee, if the licensee is ordered to take any protective measures. Ownership of cultural resources discovered shall be determined in accordance with applicable law.

9. All waste material will be contained on site in a trash cage or other portable storage device and hauled to a county approved landfill. No hazardous materials/hazardous wastes or trash shall be disposed of on lands under this license. If a release does occur, it shall be reported to this office immediately.

COMPLIANCE PLAN(S):

Compliance Schedule
Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan
The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

Assignment of Responsibility
Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Land Law Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: